
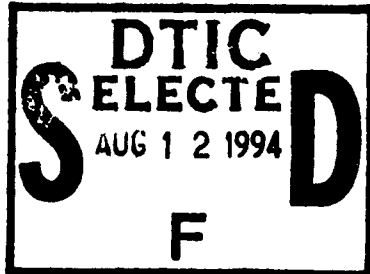


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TOTAL QUALITY MANAGEMENT (TQM)

AT THE USAF ACADEMY

by

Ronald D. Reed
Lieutenant Colonel, USAF

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IN

FULFILLMENT OF THE CURRICULUM REQUIREMENT

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POSITION PAPER

ON

TOTAL QUALITY MANAGEMENT (TQM) AT THE USAF ACADEMY

1. Key TQM principles should be applied at the Academy to improve efficiency and effectiveness. To support this assertion, this paper first will clarify the need for renewed TQM efforts at the Academy. It will then examine TQM principles and unique challenges in their implementation for academic organizations. Finally, it will highlight some specific areas and ways for TQM-based improvement at the Academy. To limit the scope of this task, I will focus on the academic environment and exclude administration or support areas.

2. The Academy needs emphasis on TQM now. At the heart of TQM is the continuous drive to improve quality and competitiveness in a customer-oriented market.¹ Yet, last year the General Accounting Office questioned the Academy's ability to provide academic quality vs. civilian counterparts; and this year Congress attacked the management and educational model of our all-military Academy vs. sister services.² Further, in an era of declining resources, the Academy must justify to senior leaders the merits of its program vs. such other commissioning sources as ROTC and OTS. Finally, it can be expected that with military drawdowns and fewer Academy-linked incentives (i.e., pilot slots or regular commissions)³ potential cadets will carefully examine the value of our program vs. civilian ones. All these factors clarify our concern for Academy improvement, and TQM is a way to accomplish such improvement--this already has been seen at other academic institutions.⁴

3. TQM principles can be applied to education, but implementation raises unique challenges. The culture(s) of an academic organization differ from

those of business. In this regard, departments under the Dean reflect the Harvard University organizational model described by Bolman and Deal.⁵ Such cultures traditionally embrace concepts of departmental autonomy, individual academic freedom, and a professional elitism or specialization that resist change.⁶ The good news is that academia also has a well-established emphasis and literature on evaluating and improving educational programs; this serves as a foundation for TQM initiatives. Beyond this, one feature of traditional academia is a lack of strong leadership or leader training;⁷ this is an area where the AF has an advantage for fostering TQM, where leadership is vital.⁸

4. A second challenge in applying TQM in academics is in defining and integrating multiple customers and requirements.⁹ External customers for the Academy's key product (the graduating cadet) are the AF units they will serve. Yet, Congress has exercised ongoing oversight of the Academy's functional, symbolic, and political roles. Internally, instructors form a network of suppliers and customers as we prepare cadets for a series of core and advanced courses. And ultimately, of course, cadets themselves are vital customers for the educational experiences offered to them. All these customers, and more, should be considered and consulted during TQM implementation.

5. Third, effectiveness in achieving broad educational goals is hard to measure, though measurement and analysis are critical to TQM.¹⁰ Specifically, the Academy works to help cadets gain the "knowledge, character and motivation essential to leadership as career officers."¹¹ Civilian institutions have found that such intangible endpoints are hard to measure.¹² Care must be used to avoid focusing on what's easy to measure (number of lessons, length of readings, faculty credentials, contact time, etc.) instead of seeking measures of real performance and analyzing processes to achieve defined objectives.

6. Despite challenges in adapting TQM to academics, it is being done at many institutions.¹³ The Academy's leadership has begun TQM implementation, too, paving the way for specific areas or goals to pursue (as in a Shewhart cycle of improvement, Plan-Do-Check-Act).¹⁴ Thus, having set the stage for TQM at the Academy, I will highlight three such areas with respect to TQM principles along with ways to focus or enhance implementation.

7. Under TQM the senior leadership of any organization should develop a vision to inspire and guide its members; and this integrated vision should be linked to strategic planning, as recently implemented at Annapolis.¹⁵ In this light, the Academy mission statement and guiding principles fall short.¹⁶ In the process of establishing a distinct vision, two areas should be addressed soon. First, the Dean's guiding principles view the Academy as a "community of soldier-scholars." This must now mesh with Congressional intent to reach a 50-50 mix in military-civilian manning--the way we view ourselves and our work must be brought back into consonance with our changing organization. Second, there should be an affirmation of the extent to which officers and their research are an Academy "product." Our mission is rightfully focused on cadets, yet the official faculty Job Description also emphasizes consultation and research for AF or DoD organizations. This broader vision of the Academy (as an ongoing resource of expertise in addition to a source of commissioned cadets) should be clarified. Faculty surveys have shown that pressure to do research for AF benefit and professional development, without administrative and resource support or a clear view of its value to organizational objectives, can lead to perceived waste of energy and dissatisfaction.

8. Customer involvement and requirements must be clarified despite their multiplicity. Centrally, students should be involved in the evaluation and

improvement of courses and curriculum. The current end-of-course critique helps; however, other proven tools include the interview of newly declared majors and of graduates (i.e., follow-up studies).¹⁷ Of particular value might be a gaining-unit survey to validate the performance of cadets in their first assignment, an approach that has been endorsed by the Superintendent. Similarly, departments can do both internal curriculum assessment and achieve tighter ties to other departments and AF units (e.g., labs) to ensure our instruction is pertinent and competitive.¹⁸

9. On the human side of TQM, ensuring teamwork remains a challenge. Leaders, especially department heads, must ensure solid human relations efforts as civilians are integrated into our faculty structure. We must seek new synergies to improve quality as we "reframe" our organization, as this change might be viewed by Bolman and Deal. In another area, teamwork is needed to reexamine the integration of the core curriculum across the Academy. As one example, over the last 10 years a dual educational system in military history and other aspects of military studies has evolved under both the Dean and the Commandant.¹⁹ Redundancies and inconsistencies in this or other areas should be found and eliminated to enhance efficiency. Ultimately, it is our people (and teams of them) who will implement TQM; we must invest in and empower them to explore such changes. It is their continuing education, expertise, and enthusiasm that will ensure the viability of TQM at the Academy.

10. This paper has shown that TQM is needed at the Academy and that, despite special challenges of an academic environment, TQM principles can be profitably employed there. Although not all TQM principles or practices could be discussed here, the benefits of pursuing TQM have been supported with specific examples. I recommend pursuit of these concepts and concerns.

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- 1 Department of Defense (DoD), *Total Quality Management Guide, Vol. I, Key Features of the DoD Implementation* (Washington DC, undated), 1-15; Department of Defense, *Total Quality Management Guide, Vol. II, A Guide to Implementation*, DoD 5000.51-G Final Draft (Washington DC, 15 Feb 90), 1-3.
- 2 Maze, Rick, "Bill would cut status, officer staff of academies," *Air Force Times*, 19 Oct 1992. Similar articles have appeared over the last year.
- 3 Ibid.
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- 8 DoD Vol. II, 2-3 -2-5; Leffel et al., 63-64.
- 9 Seymour, *On Q*, 48-49; Sheer and Lozier, 7-8; Winter, 59-69.
- 10 DoD, Vol I, 37-67; Seymour, *On Q*, 86-93.
- 11 *Dean of the Faculty Handbook* (USAF Academy CO, July 1992), 1.
- 12 Bogue and Saunders, 12-17.

- 13 See Note 4.
- 14 DoD Vol. I, 70; Seymour, On Q, 77.
- 15 USNA Strategic Plan (Annapolis MD, US Naval Academy, 1992).
- 16 In the *Dean of the Faculty Handbook*, pp. 1-2, "The mission of the Air Force Academy is to provide instruction and experience to all cadets so they graduate with the knowledge, character, and motivation essential to leadership as career officers in the United States Air Force." Further, faculty Guiding Principles are 1) provide quality education, 2) promote responsibility and trust, and 3) be a community of soldier-scholars. In contrast, the *USNA Strategic Plan*, p. 5, inserts a distinct Vision statement between its Mission and Guiding Principles. This Vision adds such concepts as commitment to "total quality education" and the goal of becoming "the standard bearer in officer accession."
- 17 Bogue and Saunders, 94-118
- 18 Ewell, Peter T., "Assessment and TQM: In Search of Convergence," in *Total Quality Management in Higher Education*, Lawrence A. Sheer and Deborah J. Teeter, eds., San Francisco CA, Jossey-Bass Inc., 1991, pp. 39-52.
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